



UNIVERSITY OF  
SOUTH DAKOTA

**DIVISION OF HEALTH AFFAIRS**

# **INFECTION CONTROL POLICIES & PROCEDURES MANUAL**

**Revised July 26, 2019**



# Contents

PURPOSE:.....	3
GENERAL STUDENT SAFETY GUIDELINE (INFECTION CONTROL/STUDENT SAFETY) .....	3
STANDARD PRECAUTIONS.....	4
TRANSMISSION BASED PRECAUTIONS: .....	5
Airborne Precautions: .....	5
Droplet Precautions: .....	5
Contact Precautions:.....	5
OCCUPATIONAL EXPOSURE TO INFECTIOUS AND ENVIRONMENTAL HAZARDS .....	0
EDUCATIONAL ACCOMMODATIONS RELATED TO AN EXPOSURE: .....	2
ENTERING AND VISITING STUDENT IMMUNIZATION POLICY .....	3
IMMUNIZATION COMPLIANCE POLICY.....	6
ANNUALLY REQUIRED IMMUNIZATIONS.....	6
STUDENTS INFECTED WITH BLOODBORNE PATHOGENS (HIV, HBV, HCV).....	7
OTHER SPECIAL CONSIDERATIONS: .....	8
The Pregnant Student.....	8
Health Insurance .....	8
Required Vaccine Declination .....	8
APPENDIX .....	9
University of South Dakota Health Sciences REQUIRED IMMUNIZATION FORM .....	13
University of South Dakota Sanford School of Medicine REQUIRED IMMUNIZATION FORM .....	13
SPECIFIC STUDENT SAFETY GUIDELINES.....	21
HEPATITIS B VIRUS (HBV).....	21
HEPATITIS C VIRUS (HCV).....	22
HUMAN IMMUNODEFICIENCY VIRUS (HIV): .....	22
TUBERCULOSIS: .....	22
MENINGOCOCCAL DISEASE: .....	23
INFLUENZA: .....	23
VARICELLA ZOSTER VIRUS (VZV) (Chicken Pox/Shingles):.....	23
MEASLES (RUBEOLA), MUMPS, RUBELLA: .....	24
TETANUS, DIPHTHERIA, ADULT PERTUSSIS:.....	24

## PURPOSE:

For the protection of the health of our students and because of the risks of exposure to infectious diseases to which students are subjected in the course of clinical work, certain tests and immunizations are required. This manual outlines those tests and immunizations and other infection control practices for a student within the Sanford School of Medicine and USD School of Health Sciences programs of physician's assistant studies, occupational therapy, physical therapy, dental hygiene, addiction studies, medical laboratory science, social work, and nursing, and Health Sciences Major Paramedic Specialization. Because of the individual nature of each program and its clinical experiences, the specifics of this policy may vary slightly. This manual is reviewed and updated on an annual basis by an appointed *ad hoc* committee including the Sanford School of Medicine Chief of Infectious Diseases, and other representatives from both the Sanford School of Medicine and the USD School of Health Sciences.

**Students are also responsible for being familiar with the policies and practices of the facility at which they are training.**

## GENERAL STUDENT SAFETY GUIDELINE (INFECTION CONTROL/STUDENT SAFETY)

The scope of the term "Infection Control" is all encompassing and includes, but is not limited to prevention, treatment, infection control, microbiology, pharmacology and epidemiology. The purpose of this section of the student manual is to provide guidelines for the *prevention of acquisition* of an infectious disease by the student from the patient or environment and the *prevention of transmission* of an infectious disease from student to the patient (or patient to patient via the student). The safety techniques (i.e. HAND HYGIENE #1) presented here will serve to prevent *both* acquisition and transmission of infections and therefore are called STANDARD PRECAUTIONS.

Additional precautions may be necessary and are called TRANSMISSION-BASED PRECAUTIONS.

Students will be given instruction in precautionary and infection control measures for bloodborne pathogens and communicable diseases prior to students' first contact with patients and first contact with human tissue, blood products, and body fluids. Specific training will be given on hand hygiene, use of personal protective equipment, handling of sharps, and specific isolation precautions to ensure students are aware of how to prevent acquisition and transmission of infectious diseases. In addition, students will be instructed on what constitutes an exposure and the protocol to follow in the event of an exposure. Follow-up training will be provided on an annual basis.

However, no matter how careful one is and no matter how carefully one adheres to STANDARD PRECAUTIONS and TRANSMISSION-BASED PRECAUTIONS, accidents and exposures can happen – accidents/conditions that may expose you to an infectious agent. It is important for students to be aware of the process of reporting accidents in pursuit of treatment and/or prophylaxis where appropriate. In case of an accidental exposure to bloodborne pathogens or other infectious agents, following the SPECIFIC, organism-based guidelines may save your life!

In addition to policies from the programs regulating professional dress, the following policies are in place to prevent the acquisition and transmission of infections:

- Fingernails:

Keep natural nail tips less than ¼ inch in length.

Artificial nails, add-ons or extenders are not to be worn by staff or students who provide direct patient care.

- Footwear:

Employees and students must wear shoes that are appropriate to their job role/function and area.

Shoes must be clean and well-kept. Socks or hosiery must be worn by all individuals who have patient contact. For those employees and students that provide patient care or whose job or training involves potential contact with blood and body substances or that use patient care supplies and equipment, footwear must completely cover the entire top of the foot and have no holes.

## STANDARD PRECAUTIONS

- A. Must be used in the care of all patients, regardless of diagnosis.
- B. Requires the use of appropriate barriers (Personal protective equipment – PPE, (gloves, eye protection, masks, gowns, face shields) as needed to prevent contact with blood, body fluids, secretions, excretions and contaminated items. Gloves are single use and disposable.
- C. Requires hand hygiene:
  - Handwashing (15 seconds with antimicrobial soap and warm water) or use of an appropriate antiseptic hand cleanser, before donning gloves, after glove removal and before and after patient contact.
  - Hand hygiene may be required between tasks or procedures on the *same* patient to prevent cross contamination of different body sites.
  - Other times hand hygiene is important: when coming on duty, after use of toilet facilities, after blowing or wiping nose or coughing, before and after eating, before going off duty. When hands are visibly soiled, wash with antimicrobial soap and water instead of hand antiseptic cleanser.
- D. Disposable sharps with engineered safety features will be used at all times in compliance with OSHA Standards to reduce risk of occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps. These will have safety features that are activated after use and prior to disposal. Sharps must be disposed of in an appropriate sharps disposal puncture-proof container immediately after use. Needles will not be recapped, broken or disassembled before disposal.
- E. Laboratory specimens from all patients are collected in designated containers and placed for transport in bags labeled with the biohazard symbol.
- F. Special measures may be indicated for hospitalized patients in addition to the routine practices of Standard Precautions. When these types of precautions are discontinued, Standard Precautions will be maintained. Standard Precautions are used in ambulatory settings including those with a history of drug resistant organisms.

## TRANSMISSION BASED PRECAUTIONS:

***Don appropriate PPE prior to entering the room and doff PPE prior to exiting the room.***

### **Airborne Precautions:**

- To be used for patients known or suspected to have microorganisms transmitted by small airborne droplet nuclei (e.g. tuberculosis, measles, varicella).
- Requires a private room for the patient with negative air pressure to surrounding areas, and 6-12 air exchanges per hour.
- Requires respiratory protection (usually a disposable, particulate respirator) when entering the room if the patient is known or suspected to have tuberculosis or other airborne pathogens.
- Fit testing is required if N95 or greater mask is indicated.
- Susceptible individuals should not enter the room of patients known or suspected to have measles or varicella. If susceptible persons must enter the room they should wear respiratory protection.

### **Droplet Precautions:**

- Used for patients known or suspected to have microorganisms transmitted by large particle aerosols generated by coughing, sneezing or talking (e.g. *Haemophilus influenzae*, *Neisseria meningitidis*, Group A Streptococcus, pertussis, rubella, adenovirus, influenza, mumps, parvovirus).
- Private room for patient if possible. If a private room is not available, patients should be cohorted (grouped with similar disease), if possible, or require special separation of at least three feet between patients. Special air handling and ventilation are not required.
- Requires the uses of disposable masks when within three feet of the patient.

### **Contact Precautions:**

- Used in caring for patients known or suspected to have epidemiologically important microorganisms that can be transmitted by direct contact with patient and/or contaminated environmental surfaces (e.g. MRSA, multidrug resistant bacteria, *Clostridium difficile* and other agents that cause diarrhea, respiratory syncytial virus (RSV), parainfluenza, herpes simplex, varicella zoster, agents causing wound, skin or conjunctival infections, scabies and lice).
- A private room should be used, if possible. Cohorting or consultation with infection control personnel should be accomplished if a private room is not available.
- Requires the use of gloves when entering the room. Gloves should be changed after contact with infective material and removed after leaving the patient environment. Hand hygiene should be performed immediately after glove removal.
- Usually requires the use of gowns and masks if contact with patient or patient's environment is anticipated. For patients with diarrhea, a private room with a private bathroom is preferable. If possible, a private commode should be available at bedside.

## OCCUPATIONAL EXPOSURE TO INFECTIOUS AND ENVIRONMENTAL HAZARDS

This section provides details related to student safety guidelines for prevention, prophylaxis and the interventions available to USD Health Affairs students who have the potential for exposure to blood, other body fluids, or other potentially infectious materials during the normal course of their student educational activities.

### Policy:

Students will be given instruction in precautionary and infection control measures for blood borne pathogens and other communicable diseases prior to students' first contact with patients and first contact with human tissue, blood products, and body fluids. Specific training will be given on hand hygiene, use of personal protective equipment, handling of sharps, and specific isolation precautions to ensure students are aware of how to prevent acquisition and transmission of infectious diseases. In addition, students will be instructed on what constitutes an exposure and the protocol to follow in the event of an exposure. Students may also be given a pocket card, badge card, and/or directions on where to access the occupational exposure protocol in the event of an exposure. Follow-up training will be provided on an annual basis.

The facility providing the student's post-exposure management will be responsible for contacting the student with the results of the testing and the post-exposure evaluation. The student is responsible for completing and returning the USD Health Affairs Occupational Exposure to Infectious and Environmental Hazards form to the designated person for his/her program within 15 days of exposure.

(See Appendix for the **University of South Dakota Health Affairs Occupational Exposure to Infectious and Environmental Hazards Report Form**).

Responsibility for payment of immediate wound care, post-exposure testing or initial post-exposure prophylaxis (if recommended by the medical professional providing the consultation and based on current CDC guidelines) differs by program; check with your program for details. USD SSOM pays for initial post-exposure testing and follow-up testing for medical students involved in required clinical activities. Students assume the costs for any exposures that occur during volunteer/non-required activities.

### Definition:

An occupational exposure incident shall be defined as eye, mouth, other mucous membrane, non-intact skin or parenteral contact with blood or other potentially infectious materials that result from the performance of a health professions' student duty or assignment.

### Exposure Incidents Requiring Follow-up:

Exposure incidents requiring follow-up include, but are not limited to: a percutaneous injury with contaminated sharp/instrument, or exposures to eye, mouth, other mucous membrane, or non-intact skin with blood, body fluids or tissue, semen, vaginal secretions, cerebrospinal, synovial, pleural, peritoneal, pericardial, or amniotic fluid; respiratory resuscitation without a resuscitation device; bites resulting in blood exposure to either person involved.

Protocol:

- a. **Decontamination:** Follow good first aid techniques including thorough flushing of mucous membranes and eyes, wound care if appropriate and thorough handwashing. There is no benefit from expressing blood at the site of the injury or application of caustic agents such as bleach.
- b. **Notification and Immediate Medical Treatment:** It is the student's responsibility to report all suspected exposure incidents and seek medical treatment:
  1. Immediately report to Faculty Member/Supervisor.
  2. Immediately report to Employee Health/Infection Control Personnel in the clinical site where the exposure occurred. If the clinical site does not provide post-exposure evaluation for students you need to seek treatment at the nearest ER.
- c. **Documentation:** The student is required to report the following essential information to Employee Health/Infection Control Personnel and complete the University of South Dakota Health Affairs Occupational Exposure Report Form.
  1. Procedure being performed, including where and how the exposure occurred.
  2. Type of exposure: puncture, scratch, bite, mucous membrane of the eye, nose, or mouth, or other.
  3. Extent of exposure: type and amount of blood/body fluid/material, severity of exposure including depth and whether fluid was injected, etc.
  4. PPE (personal protective equipment) worn at the time of exposure: gloves, gown, mask, protective eyewear, face shield, etc.
  5. If related to a sharp device, description of the sharp including the brand name.
  6. Decontamination: handwashing, flushing mucous membrane of eye, nose, mouth, etc.
  7. First aid administered
  8. Source patient: known or unknown.
- d. **File the University of South Dakota Health Affairs Occupational Exposure to Infectious and Environmental Hazards Report Form:** This form may be downloaded from the portal. Do not delay seeking post-exposure evaluation and treatment for the purpose of retrieving the report form. The student is responsible for completing and returning the USD Health Affairs Occupational Exposure to Infectious and Environmental Hazards form to the designated person for his/her program within 15 days of exposure.
- e. **Questions/Concerns:** Contact your supervising faculty and program/course director as indicated. Medical students at the **Sanford Medical Center or a Sanford owned site**, should call the 24/7 Exposure Hotline; **605-333-6333 and you will be guided on how to proceed.** For exposures that occur at a **non-Sanford site**, if there are questions or concerns regarding the protocol, the student and the healthcare provider treating the exposure may call the **PELine (The National Clinician's Post-Exposure Prophylaxis Hotline); 888-448-4911.** <http://nccc.ucsf.edu/clinician-consultation/pep-post-exposure-prophylaxis/>. All other students should contact their Site Coordinator.
- f. **Billing for Testing:** Responsibility for payment of immediate wound care, post-exposure testing or initial post-exposure prophylaxis (if recommended by the medical professional providing the consultation and based on current Centers for Disease Control and

Prevention [CDC] guidelines) differs by program; check with your program for details. USD SSOM pays for initial post-exposure testing and follow-up testing for medical students involved in required clinical activities. Students assume the costs for any exposures that occur during volunteer/non-required activities.

- g. Contacting with Results:** The facility providing the student's post-exposure management will be responsible for contacting the student with the results of the testing as soon as they are available. Medical students should provide test results to their primary physician, and other students should provide results to the appropriate contact person within their programs.

### Other Occupational Exposures

The primary routes of infectious disease transmission in US healthcare settings are contact, droplet, and airborne. Students may protect themselves by having their immunizations up to date and through the adherence to standard precautions and transmission-based precautions as applicable. However, no matter how careful one adheres to standard precautions and transmission based precautions, accidents and exposures can happen. Students are responsible for following the organism specific (ie. tuberculosis, measles, mumps, pertussis, etc.) guidelines and follow-up as outlined on pages 4 and 5 of this Manual.

## EDUCATIONAL ACCOMMODATIONS RELATED TO AN EXPOSURE:

- The USD Division of Health Affairs fulfills its obligation to educate future healthcare personnel while adhering to procedures that maintain the health and safety of patients and that protect the personal rights of students with infectious diseases or immunocompromised conditions. Students who are infected with potentially communicable agents (e.g. hepatitis B, hepatitis C, or HIV) and/or are immunocompromised are expected to discuss this with their personal physician and if the physician believes that a modification of the usual clinical activities of the student is required as a result of infection with a communicable agent, the student is responsible for contacting the USD Disability Services, and/or the appropriate School of Health Sciences to develop reasonable accommodations. USD Disability Services will assist departments with the interactive accommodation process in accordance with ADA guidelines. Once an accommodation plan is agreed upon, the Department Chair/Dean then shares it with the appropriate faculty involved in the student's clinical activities. All medical records and notes, will be housed in USD Disability Services.
- The Dean of Student Affairs and/or when appropriate, discipline-specific Chairs or Deans will work together to modify the clinical activities of immunocompromised students for whom patients may pose unwarranted risks or infected students who may pose unwarranted risks to patients.
- All reasonable accommodations will be made to assist the student in achieving the requirements of the educational program. The Dean for Student Affairs/Department Chair/Dean may convene a faculty panel to assist in the process.
- A student, when provided reasonable accommodations, must be able to perform the routine duties and minimum requirements for each course/clinical assignment, and meet the technical

standards for enrollment at their specific program.

- Likewise, accommodations will be made for students in quarantine to monitor for signs and symptoms of communicable illnesses such as mumps, measles, varicella, etc.
- Decisions regarding return to educational activities will be made on an individual basis, and depend on the input from Infection Prevention at the clinical site, Student Affairs, and the student's personal healthcare provider.

## ENTERING AND VISITING STUDENT IMMUNIZATION POLICY

For the protection of the health of our students and because of the risks of exposure to infectious diseases to which students are subjected in the course of clinical work, certain tests and immunizations are required. Entering and visiting students are required to provide documentation of all required immunizations to USD Student Health prior to matriculation or visit. Immunization records are maintained by USD Student Health. As these immunizations are part of the School(s) on-going affiliation agreements with our clinical sites, students will not be allowed to register or participate in any clinical activities until documentation is provided. Students are responsible for maintaining copies of their immunization records and titer reports and keeping these records updated.

### Health Affairs Requirements:

- Students are required to follow the Immunization Compliance Policy of their specific program.
- For students in programs requiring full compliance with the USD Health Affairs Immunization Policy, the immunization form must be completed with the appropriate signatures. Include copies of titer reports and other medical records when applicable.

#### 1. **Measles (Rubeola), Mumps, Rubella.** One of the following is required:

- All students are required to have medically signed proof of TWO properly administered immunizations.

#### OR

- Immune titers for measles (rubeola), mumps, and rubella.

#### 2. **Hepatitis B immunization.** ALL students are required to receive HBV vaccination (3 doses at 0, 1 and 6 months). *The first two doses of the three dose series are required prior to the start of classes.* A positive HEP B titer without proof of vaccine dates is accepted if unable to obtain immunization dates.

#### AND

#### **Hepatitis B titer.**

- Test for anti-HBs or HbsAB (HBV surface antibodies). Recommended 1-2 months after completion of the vaccination series.
- Students admitted with *documented* prior vaccination history must also provide immune status documentation. If that is not available, current immune status will be determined by the titer.
- A copy of the titer report must accompany immunization form or be provided as soon as it is available.
- Those who do not seroconvert when the titer is done 1-2 months following the series should

be revaccinated with a full series with the titer repeated 1-2 months after the last immunization.

- Those who do not seroconvert when the titer has been delayed greater than 12 months since the initial series may choose to obtain one additional booster dose of the vaccine with the titer repeated 1-2 months after the last immunization. If the second titer remains below 10mIU/mL, the person will complete the series followed by another titer.
  - If after a second series, titers remain below 10mIU/mL, the person is considered at risk for acquiring HBV. Students should be counseled about the occupational risk and the need to obtain HBIG prophylaxis for any known or probable parenteral exposure to HBsAg-positive blood. No further vaccine series are recommended. However, it is recommended the student consult with their health care provider about being tested for HBsAg to make sure that chronic HBV infection is not the reason for vaccine non-response (assuming the 2<sup>nd</sup> negative HbsAb titer was performed 1-2 months following the last hepatitis B vaccine of the second series).
3. **Varicella/Chicken Pox immunity.** One of the following is required.
- Varicella Titer if the student has had the chicken pox that indicates immunity (copy of titer report must accompany immunization form);  
**OR**
  - Two doses of varicella immunization is indicated if there is no history of the disease or if the varicella titer is negative. Recommended interval is 4-8 weeks between doses.
4. **Tdap (tetanus, diphtheria, adult pertussis).** One life time dose of Tdap (tetanus, diphtheria, adult pertussis) is required. Tdap vaccine can be administered to healthcare workers without concern for the length of time since the most recent Td vaccine. If it has been longer than 10 years since the Tdap, a Td or Tdap booster is required.
5. **Upon admission: TB Skin Tests or Interferon Gamma Release Assay (IGRA)**
- **Initial Two-Step TB Skin Test:** Documentation of two TB skin tests is required. If the first is negative, a second TB skin test will be given in 1-3 weeks. The second negative will confirm lack of infection (any two documented TB skin tests completed within a 12 month period can meet this requirement.)  
**OR**
  - **Interferon Gamma Release Assay (IGRA)**
    - History of BCG vaccine is NOT a contraindication for tuberculin testing. TB skin test reactivity caused by BCG vaccine generally wanes with time. If more than 5 years have elapsed since administration of BCG vaccine, a positive reaction is most likely a result of *M. tuberculosis* infection.

**During enrollment:**

**6. Annual TB Skin Test:**

- Students are required to have an annual TB Skin Test

**OR**

- IGRA

**OR**

- Annual symptom checklist if history of latent TB or if a TB Skin Test is contraindicated and the student had a negative IGRA on admission to their program.

If there is a lapse greater than 13 months between annual TB skin tests, the two-step TB skin test will be repeated.

Students with a positive TB skin test or IGRA:

Are required to provide documentation from their health care provider including the following:

- Result of the positive TB skin test (date placed, read, measurement in mm, signed by a health care provider) or IGRA report.
- Chest x-ray report.
- Determination by the health care provider if this a latent TB infection or active TB disease.
- Treatment; including medication and dose, when started, when completed, etc.

Students who have active TB disease will be restricted from school and patient contact until they have provided documentation that satisfies the infection prevention policies of the health care facilities where the student trains.

**7. Annual Influenza vaccination:**

The influenza vaccine is required by November 1<sup>st</sup> annually.

**Recommended Immunizations:**

- **Meningococcal (meningitis) vaccine.** Recommended for students living in college dormitories who have not been immunized previously or for college students under 25 years of age who wish to reduce their risk.
- All 11 to 12 year olds should be vaccinated with a meningococcal conjugate vaccine (Menactra<sup>®</sup> or Menveo<sup>®</sup>). A booster dose is recommended at age 16 years. Teens and young adults also may be vaccinated with a serogroup B meningococcal vaccine. In certain situations, other children and adults could be recommended to get any of the three kinds of meningococcal vaccines. Students should consult with their physician about the appropriate vaccine for their specific risk.
- **Childhood DTP/DTaP/DPT and polio vaccines.**

## IMMUNIZATION COMPLIANCE POLICY

It is the policy that all students enrolled in medical school or any of the programs under the Health Sciences must comply with the immunization requirements of the School as defined in the USD Health Affairs Immunization Policy. **It is a part of the student's professional responsibility to meet these requirements in a timely manner and provide appropriate documentation.** See the specific immunization and TB testing timelines in the Health Affairs Immunization Requirements Policy and Health Affairs Infection Control Manual.

USD Student Health is responsible for maintaining student immunization records and counseling students on any missing requirements. Students are reminded that their professional conduct includes timely responses to contacts from Student Health.

Failure to comply with meeting the immunization requirements may preclude registration for classes, receiving financial aid, and placement into a clinical setting.

After three attempts to contact a student to bring their immunization records in compliance, Student Health will provide these names to the Dean/Chair of the program and a report of a professional conduct violation will be placed in the student file. In addition, this may result in the referral of a non-compliant student to the Student Progress and Conduct Committee for review.

## ANNUALLY REQUIRED IMMUNIZATIONS

### Annual TB Testing and Influenza Vaccination

During their enrollment, medical students are required to have an annual TB test and influenza vaccination. Both are offered on an annual basis to students who are eligible on each campus at designated times. Students who fail to have the TB testing and/or influenza vaccine during the designated times are responsible for obtaining these elsewhere and will also assume the cost.

USD Student Health is responsible for maintaining and updating the student immunization records. Students may contact USD Student Health for proof of immunizations and TB testing.

**Documentation of the annual influenza vaccination must be received by USD Student Health by November 1<sup>st</sup> of each year. Students must check with their program for the deadline for annual TB testing.** Students who do not receive their TB testing and/or influenza vaccine by Student Health or their Education Coordinator are responsible for providing this documentation to Student Health by the deadlines for each.

Documentation needs to include all of the following information: date the vaccine given/PPD administered (for TB skin testing), route and site, vaccine manufacturer, lot number, signature of person administering the vaccine/PPD and his or her title, name of the clinic and clinic address. TB skin testing documentation also needs to include date read and the results as measured in millimeters (mm). Note that a receipt is not acceptable documentation.

For those students with a history of a positive TB skin test, an initial IGRA is required.

Those students who have either a history of latent TB or a history of a positive TB skin test but who tested negative on the IGRA, will complete an annual symptom checklist and submit it to USD Student Health. The symptom checklist can be obtained from the USD web portal.

All other students will complete annual TB skin testing.

For complete details please refer to the USD Health Affairs Immunization Requirements Policy.

## STUDENTS INFECTED WITH BLOODBORNE PATHOGENS (HIV, HBV, HCV)

### Policy:

In compliance with the standards set forth in Section 504 of the 1973 Vocational Rehabilitation Act. USD Health Affairs:

1. Does not deny admission to HIV, Hepatitis B (HBV), or Hepatitis C (HCV) infected prospective students unless their health status prevents the completion of essential degree requirements and no reasonable accommodations can be made.
2. Does not inquire about the HIV, HBV, or HCV status of applicants during the admissions process.
3. Strongly encourages applicants who believe they may have been exposed to blood and/or other potential infectious materials to seek medical advice and HIV, HBV, or HCV status testing prior to admission. Such information may be relevant to the career decisions of applicants and essential to providing appropriate care to the student.
4. May not dismiss a student based solely upon their HIV, HBV, or HCV status.

### Procedures:

- SSOM students who require educational accommodations due to their infection/immunocompromised status, please refer to “Accommodations for Students Infected or Disabled During Medical School” in Student Affairs Handbook.
- All other students please refer to your program’s policy.

## OTHER SPECIAL CONSIDERATIONS:

- 1. STUDENTS WITH SKIN INFECTIONS, DIARRHEA OR CONTAGIOUS DISEASES SHOULD CONSULT THEIR PHYSICIAN AND THE HOSPITAL/CLINIC INFECTION CONTROL PROGRAMS PRIOR TO PATIENT CONTACT.**

### The Pregnant Student

Pregnancy does not preclude a health affairs student from any activities related to health care responsibilities. Prior to pregnancy, the student should ensure all immunizations are up to date and know serologic status for measles, mumps, rubella, varicella, and hepatitis B. During pregnancy, the student should receive influenza vaccine at the recommended time, maintain routine tuberculosis screening, adhere to proper infection control practices (Standard Precautions) and have prompt evaluation and treatment of any illness.

### Health Insurance

All students enrolled in a health affairs program are required to have major medical health insurance.

### Required Vaccine Declination

Declination of any of the required immunizations for medical or religious reasons will be considered on a case by case basis. The student must provide documentation from their health care provider to their Program Chair/Dean of Student Affairs that he/she was counseled regarding the efficacy, safety, method of administration, and benefits of vaccination, the risks of acquiring any of these serious diseases without vaccination, as well as potential life-threatening consequences to the patients they come in contact with. Since affiliation agreements between the University of South Dakota and the various health care systems students rotate through specifically state students will be immunized (as specified in the Immunization Policy), consultation will also be required with Employee Health of those facilities to determine if students are able to train at that site. Students may not be able to complete their educational requirements if they do not meet all the immunization requirements.

## APPENDIX

University of South Dakota Health Affairs OCCUPATIONAL EXPOSURE TO INFECTIOUS AND ENVIRONMENTAL HAZARDS REPORT FORM

University of South Dakota Health Affairs REQUIRED IMMUNIZATION FORM

University of South Dakota Health Affairs ANNUAL SYMPTOM CHECKLIST FOR TUBERCULOSIS

SPECIFIC STUDENT SAFETY GUIDELINES

University of South Dakota Health Affairs  
OCCUPATIONAL EXPOSURE TO INFECTIOUS AND ENVIRONMENTAL  
HAZARDS

REPORT FORM –DETAILS OF EXPOSURE

Medical Students: Submit to Medical Student Affairs Office (357.1422 or 658-6300)

Health Science Students Submit to Appropriate Program Office

**Student Name:** Click here to enter your full name. **Date of Report:** Enter date or pick date from calendar.

**Pillar:** Choose an item. **Course / Rotation:** Choose an item.

**Date and Time of Exposure:** Click to enter date & time.

**Location Where Exposure Occurred:**

Enter name & address of hospital, clinic, etc. where exposure occurred.

**Supervisor/Faculty:** Enter full name & title of attending physician/faculty, when exposure occurred.

***Details of Exposure: to be Completed by the Student***

*(Complete all fields below.)*

**Details of occurrence:**

Enter information about procedure being performed, setting where & how exposure occurred, etc.

**Type of exposure:** Choose an item.

**Extent of Exposure:**

Describe extent of exposure (type & amount of fluid/material, severity/depth, whether fluid was injected, etc.)

**Personal Protective Equipment Worn:** Choose an item or describe.

**If Related to a Sharp Device:** Choose from list and add brand name. If “other” describe device.

**Decontamination:** Describe – hand washing, flushing mucous membranes, etc.

**First Aid Administered:** Describe what was done to provide first aid.

**If you received treatment, please provide the location:** Choose an item.

**Date Exposure first Reported:** Enter date or pick date from calendar.

**Name and Title of Person to Whom You Reported Exposure Incident:**

Enter facility personnel full name(s) and title(s)

**Contact Information of Person to Whom You Reported Incident:**

Enter person(s) contact information.

**Student Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

University of South Dakota Health Sciences

REQUIRED IMMUNIZATION FORM

PAGE 1 of 2

Name \_\_\_\_\_ DOB \_\_\_\_\_ USD ID# \_\_\_\_\_

Program: Addiction Studies [ ] Dental Hygiene [ ] Health Science [ ] Medical Laboratory Science [ ] Medicine [ ] Nursing [ ] Occupational Therapy [ ] Physical Therapy [ ] Physician Assistant [ ] Public Health [ ] Social Work [ ] Master of Social Work [ ]

Health Affairs Requirements: For students in programs requiring full compliance with the USD Health Affairs Immunization Policy, this form must be completed with the appropriate signatures.

Include copies of titer reports and other medical records when applicable.

REQUIRED IMMUNIZATIONS:

A. MMR (Measles, Mumps, Rubella) Vaccine. Two doses required for all students born after 12/31/56.

Dates: 1. \_\_\_/\_\_\_/\_\_\_ 2. \_\_\_/\_\_\_/\_\_\_

OR individual vaccine/proof of immunity as noted below.

1 Measles (Rubeola)

Vaccine Dates: 1. \_\_\_/\_\_\_/\_\_\_ 2. \_\_\_/\_\_\_/\_\_\_

OR

Has report of positive immune titer. Date: \_\_\_/\_\_\_/\_\_\_ ATTACH LAB REPORT

2 Rubella (German Measles)

Vaccine Dates: 1. \_\_\_/\_\_\_/\_\_\_ 2. \_\_\_/\_\_\_/\_\_\_

OR

Has report of positive immune titer. Date: \_\_\_/\_\_\_/\_\_\_ ATTACH LAB REPORT

3 Mumps

Vaccine Dates: 1. \_\_\_/\_\_\_/\_\_\_ 2. \_\_\_/\_\_\_/\_\_\_

OR

Has report of positive immune titer. Date: \_\_\_/\_\_\_/\_\_\_ ATTACH LAB REPORT

B. Date of Tdap (tetanus, diphtheria, adult pertussis): Date: \_\_\_/\_\_\_/\_\_\_

If longer than 10 years; date of latest booster Date: \_\_\_/\_\_\_/\_\_\_ Td or Tdap (circle one)

C. Varicella (Chicken Pox) One of the following is required:

Documentation of positive varicella titer. Date: \_\_\_/\_\_\_/\_\_\_ ATTACH LAB REPORT

OR

Vaccine: Two doses are required for those without evidence of immunity. Recommended interval is 4-8 weeks between doses.

Dates: 1. \_\_\_/\_\_\_/\_\_\_ 2. \_\_\_/\_\_\_/\_\_\_

D. Hepatitis B Vaccine - Three doses and positive titer required. (If unable to obtain dates of immunizations a positive titer is acceptable )

1st dose Date: \_\_\_/\_\_\_/\_\_\_

2nd dose Date: \_\_\_/\_\_\_/\_\_\_ (1 month after 1st dose)

3rd dose Date: \_\_\_/\_\_\_/\_\_\_ (6 months after 1st dose)

AND

Hepatitis B Titer (HbsAB or Anti-HBs – hepatitis B surface antibodies)

Immunity demonstrated by hepatitis B titer - ATTACH LAB REPORT

Date: \_\_\_/\_\_\_/\_\_\_ Positive/Reactive \_\_\_\_\_ Negative/Nonreactive \_\_\_\_\_

(if neg. see immunization policy)

Updated 8/7/2018

University of South Dakota Health Sciences  
REQUIRED IMMUNIZATION FORM – PAGE 2 of 2

Name \_\_\_\_\_ DOB \_\_\_\_\_ USD ID# \_\_\_\_\_

E. **Tuberculosis Skin Test - PPD (Mantoux) – Two-step TB skin test required initially or Interferon Gamma Release Assay**

Two-Step TB Skin Test; recommended 1-3 weeks apart. **\*Note any two documented TB skin tests completed within a 12 month period shall be considered a two-step.**

Step 1 (Date placed)\_\_\_\_/\_\_\_\_/\_\_\_\_ Step 1 (Date read)\_\_\_\_/\_\_\_\_/\_\_\_\_ Results: \_\_\_\_\_ mm

Step 2 (Date placed)\_\_\_\_/\_\_\_\_/\_\_\_\_ Step 2 (Date read)\_\_\_\_/\_\_\_\_/\_\_\_\_ Results: \_\_\_\_\_ mm

If two-step was completed more than 12 months prior to start of classes, an annual TB skin test is required

Date placed\_\_\_\_/\_\_\_\_/\_\_\_\_ Date read\_\_\_\_/\_\_\_\_/\_\_\_\_ Results: \_\_\_\_\_ mm

Date placed\_\_\_\_/\_\_\_\_/\_\_\_\_ Date read\_\_\_\_/\_\_\_\_/\_\_\_\_ Results: \_\_\_\_\_ mm

**Interferon Gamma Release Assay (IGRA):** Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Positive \_\_\_\_\_ Negative \_\_\_\_\_

**ATTACH LAB REPORT**

**History of Positive TB Skin Test:**

Date placed\_\_\_\_/\_\_\_\_/\_\_\_\_ Date read\_\_\_\_/\_\_\_\_/\_\_\_\_ Results: \_\_\_\_\_ mm

**ATTACH COPY OF CHEST X-RAY REPORT AND DOCUMENTATION FROM HEALTHCARE PROVIDER.**

See immunization policy.

History of BCG vaccination: Date\_\_\_\_/\_\_\_\_/\_\_\_\_ (TB skin test required regardless of prior BCG vaccination)

F. **Influenza vaccine.** Required by Nov. 1st annually Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

*Not required prior to admission if starting in the summer or fall*

**RECOMMENDED IMMUNIZATIONS:**

G. **Meningococcal Vaccine (Meningitis vaccine).** Refer to immunization policy. Students should consult with their physician about their specific risk:

Vaccine: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Vaccine: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

H. **Childhood DTP/TDaP/DPT immunizations:**

Dates of Primary Series: 1. \_\_\_\_/\_\_\_\_/\_\_\_\_ 2. \_\_\_\_/\_\_\_\_/\_\_\_\_ 3. \_\_\_\_/\_\_\_\_/\_\_\_\_

4. \_\_\_\_/\_\_\_\_/\_\_\_\_ 5. \_\_\_\_/\_\_\_\_/\_\_\_\_

I. **Polio immunizations:**

Dates of Primary Series: 1. \_\_\_\_/\_\_\_\_/\_\_\_\_ 2. \_\_\_\_/\_\_\_\_/\_\_\_\_ 3. \_\_\_\_/\_\_\_\_/\_\_\_\_

4. \_\_\_\_/\_\_\_\_/\_\_\_\_ 5. \_\_\_\_/\_\_\_\_/\_\_\_\_ Type of vaccine: Oral (OPV) \_\_\_\_\_ Inactivated (IPV) \_\_\_\_\_

SIGNATURE X \_\_\_\_\_

Date \_\_\_\_/\_\_\_\_/\_\_\_\_

*Must be signed by Healthcare Provider (Physician, PA, NP, Nurse)*

PRINT NAME \_\_\_\_\_

Hospital/Clinic Address of physician or nurse verifying this information: Hospital/Clinic Phone #

**A copy of titer/lab reports must be provided with this form as indicated above.**

*Updated 8/7/2018*

University of South Dakota Sanford School of Medicine  
REQUIRED IMMUNIZATION FORM

**Medical students need to complete this form:**

<https://www.aamc.org/download/440110/data/immunizationform.pdf>

Hepatitis B – Frequently Asked Questions

[https://www.aamc.org/download/440114/data/immunizationform\\_hepb\\_faqs.pdf](https://www.aamc.org/download/440114/data/immunizationform_hepb_faqs.pdf)

University of South Dakota Health Affairs  
ANNUAL SYMPTOM CHECKLIST FOR TUBERCULOSIS

*This form is to be used annually when a student has had a positive result occur from Tuberculosis screening using either skin testing (PPD) or blood sample (IGRA).*

Student's Name: \_\_\_\_\_

Date: \_\_\_\_\_

***In the last year have you experienced any of the following symptoms for more than three weeks at a time?***

SIGN & SYMPTOM REVIEW:	YES	NO
Persistent cough		
Excessive sweating at night		
Unexplained weight loss		
Coughing up blood		
Excessive fatigue		
Persistent fever		

TB skin test:      Date \_\_\_\_\_      Reading (mm) \_\_\_\_\_

Quantiferon/IGRA: Date \_\_\_\_\_      Results \_\_\_\_\_

Date of last chest x-ray \_\_\_\_\_

Chest x-ray results \_\_\_\_\_

Prophylactic treatment received? If yes; drug, dosage, and duration of treatment.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Student's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Nurse's Signature

\_\_\_\_\_  
Date

## SPECIFIC STUDENT SAFETY GUIDELINES

(General information, Prevention, Prophylaxis/Treatment)

This section of your manual briefly summarizes the specific exposures you might have, the prevention strategies that must be followed and the treatment/prophylaxis available. In case of accidental needle sticks or injury with other contaminated sharp object (scalpel) or exposure to an infectious agent where treatment or prophylaxis is available, it may be a specific hospital Infection Control Program or Emergency Room or Clinic nurse that will walk you through the reporting and treatment/prophylaxis process for that institution. Use this information to be your own advocate in ensuring your proper follow-up.

ANY exposure to patient blood and body fluids – percutaneous, splash into eyes, mucous membranes or onto already injured skin – may carry with it organisms that can kill and/or severely compromise your life (i.e. HIV). There are NO exposures minor enough to ignore; all exposures must be reported – for your safety.

### HEPATITIS B VIRUS (HBV)

#### ***Prevention/Prophylaxis/Treatment/Follow-up:***

ALL students are required to receive HBV vaccination (3 doses at 0, 1 and 6 months). The first two doses of the three dose series are required prior to the start of classes. A positive HEP B titer without proof of vaccine dates is accepted if unable to obtain immunization dates.

#### ***AND***

#### Hepatitis B Titer

- Test for anti-HBs or HbsAB (HBV surface antibodies). Recommended 1-2 months after completion of the vaccination series.
- Students admitted with *documented* prior vaccination history must also provide immune status documentation. If that is not available, current immune status will be determined by the titer.
- A copy of the titer report must accompany immunization form or be provided as soon as it is available.
- Those who do not seroconvert when the titer is done 1-2 months following the series should be revaccinated with a full series with the titer repeated 1-2 months after the last immunization.
- Those who do not seroconvert when the titer has been delayed greater than 12 months since the initial series may choose to obtain one additional booster dose of the vaccine with the titer repeated 1-2 months after the last immunization. If the second titer remains below 10mIU/mL, the person will complete the series followed by another titer.
- If after two complete series, titers remain below 10mIU/mL, the person is considered at risk for acquiring HBV. Students should be counseled about the occupational risk and the need to obtain HBIG prophylaxis for any known or probable parenteral exposure to HBsAg-positive blood. No further vaccine series are recommended. However, it is recommended the student consult with their health care provider about being tested for HBsAg to make sure that chronic HBV infection is not the reason for vaccine non-response (assuming the

2<sup>nd</sup> negative HbsAb titer was performed 1-2 months following the last hepatitis B vaccine of the second series).

- **Additional information:**

- CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Post exposure Management:  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6210a1.htm>
- CDC Epidemiology and Prevention of Vaccine-Preventable Diseases; Pink Book (2015):  
<http://www.cdc.gov/vaccines/pubs/pinkbook/hepb.html>

## HEPATITIS C VIRUS (HCV)

### **Prevention/Prophylaxis/Treatment/Follow-up:**

Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Post exposure Prophylaxis.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm>

Bloodborne Exposures Algorithm (see Appendix)

## HUMAN IMMUNODEFICIENCY VIRUS (HIV):

### **Prevention/Prophylaxis/Treatment/Follow-up:**

Please refer to the Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to Human Immunodeficiency Virus and Recommendations for Post exposure Prophylaxis (Sept. 2013): <http://www.jstor.org/stable/10.1086/672271>

The decision to take anti-retroviral drugs may be difficult. Free consultation is available through the PEpline (The National Clinician's Post-Exposure Prophylaxis Hotline):

<http://nccc.ucsf.edu/clinician-consultation/pep-post-exposure-prophylaxis/>

Follow the procedure as outlined in the Occupational Exposure to Infectious and Environmental Hazards protocol.

1. Exposure decontamination: Good first aid
2. Documentation and Follow-up
3. Notification
4. Completing Report Forms

## TUBERCULOSIS:

### **Prevention/Prophylaxis/Treatment/Follow-up:**

TB Skin Tests or Interferon Gamma Release Assay (IGRA)

- Initial Two-Step TB Skin Test: Documentation of two TB skin tests is required. If the first is negative, a second TB skin test will be given in 1-3 weeks. The second negative will confirm lack of infection (any two documented TB skin tests completed within a 12 month period can meet this requirement.)

OR

- Interferon Gamma Release Assay (IGRA)
- History of BCG vaccine is NOT a contraindication for tuberculin testing. TB skin test reactivity caused by BCG vaccine generally wanes with time. If more than 5 years have

elapsed since administration of BCG vaccine, a positive reaction is most likely a result of *M. tuberculosis* infection.

Students with a positive TB skin test or IGRA: Are required to provide documentation from their health care provider including the following:

1. Result of the positive TB skin test (date placed, read, measurement in mm, signed by a health care provider) or IGRA report.
2. Chest x-ray report.
3. Determination by the health care provider if this a latent TB infection or active TB disease.
4. Treatment; including medication and dose, when started, when completed, etc.

Students who have active TB disease will be restricted from school and patient contact until they have provided documentation that satisfies the infection prevention policies of the health care facilities where the student trains.

Students with a known history of a positive TB skin test/latent disease or if a TB Skin Test is contraindicated and the student had a negative IGRA on admission, will complete a symptom checklist annually (see Appendix for form).

**Additional information:** <https://www.cdc.gov/tb/default.htm>

#### MENINGOCOCCAL DISEASE:

**Prevention/Prophylaxis/Treatment/Follow-up:**

This is a recommended vaccine for any students in a health related program at USD. Please refer to the CDC's Epidemiology and Prevention of Vaccine-Preventable Diseases; The Pink Book 13<sup>th</sup> Ed (2015): <http://www.cdc.gov/vaccines/pubs/pinkbook/mening.html>

All 11 to 12 year olds should be vaccinated with a meningococcal conjugate vaccine (Menactra<sup>®</sup> or Menveo<sup>®</sup>). A booster dose is recommended at age 16 years. Teens and young adults also may be vaccinated with a serogroup B meningococcal vaccine. In certain situations, other children and adults could be recommended to get any of the three kinds of meningococcal vaccines. Students should consult with their physician about the appropriate vaccine for their specific risk.

#### INFLUENZA:

All Health Affairs students are required to have the flu vaccine by November 1<sup>st</sup> annually.

<http://www.immunize.org/catg.d/p2017.pdf>

<http://www.cdc.gov/flu/healthcareworkers.htm>

#### VARICELLA ZOSTER VIRUS (VZV) (Chicken Pox/Shingles):

**Prevention/Prophylaxis/Treatment/Follow-up:**

One of the following is required:

1. Varicella Titer if the student has had the chicken pox that indicates immunity (copy of titer report must accompany immunization form);

**OR**

2. Two doses of varicella immunization is indicated if there is no history of the disease or if the varicella titer is negative. Recommended interval is 4-8 weeks between doses.

**Additional information:** <http://www.cdc.gov/vaccines/pubs/pinkbook/varicella.html>

#### MEASLES (RUBEOLA), MUMPS, RUBELLA:

##### **Prevention/Prophylaxis/Treatment/Follow-up:**

One of the following is required:

- All students are required to have medically signed proof of TWO properly administered immunizations.

##### **OR**

- Immune titers for measles (rubeola), mumps, and rubella.

**Additional information:** <http://www.immunize.org/catg.d/p2017.pdf>

#### TETANUS, DIPHTHERIA, ADULT PERTUSSIS:

##### **Prevention/Prophylaxis/Treatment/Follow-up:**

One time dose of Tdap (tetanus, diphtheria, adult pertussis) is required. Tdap vaccine can be administered to healthcare workers without concern for the length of time since the most recent Td vaccine. If it has been longer than 10 years since the Tdap, a Td or Tdap booster is required.

**Additional information:** <http://www.cdc.gov/vaccines/pubs/pinkbook/pert.html>